

REMARKS

Claims 1, 4, 5, 7-10, and 25-28 are pending in this application. Claims 1, 4, and 25 are amended while claims 27 and 28 are new. Applicants assert that these claims are in condition for allowance.

103 Rejections

Claims 1, 4, 5, 7-10, 25, and 26 are rejected under 35 USC 103(a) as being unpatentable over U.S. Pat 7,286,878 to Stypulkowski in view of U.S. Pat. 6,141,588 to Cox. Applicants respectfully traverse these rejections.

Claim 1

Claim 1 recites “a first lead coupled to the central control module that comprises at least one connector, the first lead carrying power from the power source and digital communications including the programming signals from the wireless receiver, the power and the digital communications being combined on the at least one connector...”

Applicants previously asserted that Stypulkowski fails to disclose the first lead carrying power. The present Office Action has agreed but has introduced Cox to show a planet providing electromagnetic energy to a satellite to allow the satellite to recharge a battery. The Advisory Action further asserts that the teaching by Cox shows that one of ordinary skill in the art would be aware of the general notion of providing power from a planet or central module to a satellite module, regardless of Cox’s system being a wireless transfer as opposed to the transfer via the first lead as in claim 1. The Final Office Action and Advisory Action conclude that Stypulkowski as modified by Cox renders claim 1 as obvious.

Applicants note that as presently pending, claim 1 recites that the power and digital communications are combined on the at least one connector of the first lead. Applicants contend that the combination of Stypulkowski and Cox fails to render claim 1 obvious in view of at least these recitations.

Stypulkowski discloses that the IPG may program the extension unit. Stypulkowski further discloses that input lines 302-306 are connected to the controller of the extension unit

and the controller may include hardware or software to recognize programming signals that the controller may then use to program the wave shapers and switches. The implication is that the programming signals are present on the input lines 302-306 also carrying the pulses to the wave shapers. However, considering Stypulkowski does not provide power to the extension unit from the IPG but instead utilizes a battery within the extension unit, there is no combination of power and digital communications on a connector of a lead.

Cox shows the wireless transfer of power from the planet to the satellite. Cox also discloses that encoded data may be superimposed on the electromagnetic energy being wirelessly transferred to power the circuitry of the satellite.

However, the attempted combination of Stypulkowski and Cox fail to meet the claim recitations for multiple reasons. First, Stypulkowski implicitly provides for the programming to be included on the input lines to the wave shapers rather than on an input line carrying power to circuitry such as the controller. Thus, it is Stypulkowski's principle of operation to utilize the energy on the lines carrying the data for purposes of stimulation and not for purposes of powering circuitry within the extension unit. Therefore, regardless of the disclosure of Cox, Stypulkowski has a principle of operation that precludes carrying power on a lead connector carrying data to circuitry.

Second, should Stypulkowski be modified to include the transfer of power from the IPG to circuitry of the extension unit as suggested by the Final Office Action and Advisory Action, one of ordinary skill in the art would not be motivated to also combine digital communications including programming with the transfer of power even though Cox discloses combining them in the wireless signal because Stypulkowski utilizes the principle of operation that the data be included on the pulses to the wave shapers that become stimulation. Therefore, there would be no need to combine such data with a power signal since such data transfer would be superfluous to the existing data transfer via input lines 302-306.

For at least these reasons, the combination of Stypulkowski and Cox fails to meet the recitations of claim 1 such that claim 1 is allowable. Dependent claims 4, 5, 7-10, and 27-28 depend from an allowable base claim and are also allowable for at least the same reasons.

Claim 25

Claim 25 recites “an elongated conductor comprising at least one connector and having a distal end portion and a proximal end portion, the proximal end portion coupled to the central control module, the elongated conductor carrying power from the power source and digital communications including the programming signals from the wireless receiver, the power and the digital communications being combined on the at least one connector....”

Applicants note that as presently pending, claim 25 recites that the power and digital communications are combined on the at least one connector of the elongated lead. Applicants contend that the combination of Stypulkowski and Cox fails to render claim 25 obvious in view of at least these recitations.

Stypulkowski discloses that the IPG may program the extension unit. Stypulkowski further discloses that input lines 302-306 are connected to the controller of the extension unit and the controller may include hardware or software to recognize programming signals that the controller may then use to program the wave shapers and switches. The implication is that the programming signals are present on the input lines 302-306 also carrying the pulses to the wave shapers. However, considering Stypulkowski does not provide power to the extension unit from the IPG but instead utilizes a battery within the extension unit, there is no combination of power and digital communications on a connector of a lead.

Cox shows the wireless transfer of power from the planet to the satellite. Cox also discloses that encoded data may be superimposed on the electromagnetic energy being wirelessly transferred to power the circuitry of the satellite.

However, the attempted combination of Stypulkowski and Cox fail to meet the claim recitations for multiple reasons. First, Stypulkowski implicitly provides for the programming to be included on the input lines to the wave shapers rather than on an input line carrying power to circuitry such as the controller being used to selectively route the stimulation. Thus, it is Stypulkowski’s principle of operation to utilize the energy on the lines carrying the data for purposes of stimulation and not for purposes of powering circuitry within the extension unit being used to selectively route the stimulation from the wave shapers. Therefore, regardless of the disclosure of Cox, Stypulkowski has a principle of operation that precludes carrying power to circuitry on a lead connector carrying data to that circuitry.

Second, should Stypulkowski be modified to include the transfer of power from the IPG to circuitry of the extension unit as suggested by the Final Office Action and Advisory Action, one of ordinary skill in the art would not be motivated to also combine digital communications including programming with the transfer of power even though Cox discloses combining them in the wireless signal because Stypulkowski utilizes the principle of operation that the data be included on the pulses to the wave shapers that become stimulation. Therefore, there would be no need to combine such data with a power signal to circuitry such as that involved in routing the stimulation signals since such data transfer would be superfluous to the existing data transfer via input lines 302-306.

Claim 25 and dependent claim 26 are allowable over Stypulkowski in view of Cox for at least these reasons.

Conclusion

In view of the foregoing amendments, Applicants respectfully request reconsideration and allowance of the claims as all rejections have been overcome. Early notice of allowability is kindly requested.

The Examiner is respectfully requested to contact the undersigned by telephone at 770.643.8913 with any questions or comments.

While no fees are believed due beyond those already paid, please grant any extension of time, if necessary for entry of this paper, and charge any fee due for such extension or any other fee required in connection with this paper to Deposit Account No. 13-2546.

Respectfully submitted,

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